

### ANTICIPATING THE FUTURE

### Top Performers Reimagine the Teaching Profession

How can we build a teaching force that is empowered, resilient and adaptive to future shocks, innovative, and responsive to new challenges and opportunities?

Many places in the United States are trying to answer these questions—to attract and prepare teachers that will empower all learners today and prepare them for the future. Leading global education systems offer many insights, lessons learned, and inspirational models for thinking creatively about the future of teaching.

Future-Oriented Education Systems ) Continue to...

Collaborate with teachers to **reimagine the profession** and redefine how professional learning happens

**Empower learners** to take ownership and make informed choices about their learning journeys

Embed **digital skills** into curriculum, pedagogy, assessment, and credentialing

#### ) And forge ahead on...

Supporting **student agency** to engage all students as global citizens and problem-solvers

Giving students the skills to **learn throughout their lives**, so they can thrive in ever-changing futures

Redesigning the education experience by leveraging technology to foster deeper learning and better prepare all learners to transition into the new economy

## Current & Emerging Global Insights

Top performers are reimagining the teaching profession to better prepare young people for the future based on the following priorities.

## Five current priorities

- Rethinking teacher preparation
- Fostering teacher collaboration
- Creating a culture of respect
- Using technology to support learning
- Empowering learner agency

### Four emerging priorities

- Empowering teacher leaders to shape policy
- Supporting learning anytime, anywhere
- Promoting learning for life
- Exploring digital technology and AI



Examples at home:

Look for these boxes for examples of best practices in U.S. states and school districts.

## Conditions for success

- Clearly communicated goals
- Clear and consistent incentives, structures, and supports
- Robust digital infrastructure
- Time and flexibility for teachers during the school day

# Conditions for Success Strategic Systems

Global leaders are able to recruit, retain, and grow a robust teaching corps because of policy conditions that extend beyond teachers and teaching. These include the following:



The goals, purposes, and value of education are clearly communicated across the whole of the education system and broadly understood by all. Students, teachers, communities, businesses, and broader stakeholders understand why education is important, how it prepares students to contribute to the economy and society, and how it contributes to a prosperous future.

That holistic vision for education is aligned with **incentives**, **structures**, **and supports for teachers and students**, including the standards to which they are held, the growth opportunities available to them, and the learning experiences they receive throughout their careers.

#### Robust digital infrastructure and equitable access to

**technology** are prioritized. Global leaders are able to monitor students' progress, needs, goals, and touch points across the education ecosystem, while putting guardrails in place to protect students' private data. Teachers are supported in using technology to lessen the administrative burdens while also monitoring learning, communicating with families, and classroom teaching. Systems work to provide students and families equal access to digital devices that support learning.

**Time and flexibility in the school day** should enable educators to collaborate with one another, further their professional learning goals, and exercise leadership to support the whole school, district, and system. Students, in turn, have dedicated time for 1:1 support, self-guided learning, and extracurricular activities that build a wide range of skills.

## Seizing the Moment Five Current Priorities



#### Examples at home:

In 2022, New Mexico expanded the state's teacher residency program, which requires that aspiring teachers get at least one year of residency before being certified. New legislation increases teacher residents' stipends, adds selection requirements and professional learning for mentor teachers, and structures the residency in a cohort-based model to facilitate peer-to-peer collaboration. The goal is to attract both a broader and more diverse candidate pool.

## Rethinking teacher preparation

Teachers' standards and certification requirements are evolving to ensure that every teacher gets the support needed to thrive. As the job of teaching continues to change, teacher preparation program content and structure, the nature of the candidates' practicum, mentoring programs, and teachers' standards and accountability systems keep pace.

- Australia recently overhauled teacher preparation certification.
   Based on evidence that preparation is most effective when grounded in the science of learning, the new regulations require a focus on four priority areas: brain science and development, effective pedagogical practices, classroom management, and responsive teaching.
- Estonia publishes new frameworks for teacher preparation every five years. Recent priorities included better supporting candidates in their practicum and requiring teachers to specialize in at least two subjects to better develop cross-cutting competencies. About 50 percent of teachers teach students while pursuing their university credentials, whether they are preservice teachers in practical experiences, career changers splitting their time between universities and the classroom, or long-standing teachers pursuing continuing education.
- In British Columbia, changes to the provincial curriculum and teaching standards in 2016 prompted a redesign of teacher preparation programs. Over the past five years, courses were restructured to draw on the new curriculum frameworks. Universities collaborated closely with teachers to make courses and tools relevant to the new curriculum design.



## Fostering teacher collaboration

Preserving time so teachers can collaborate for growth and development remains a priority even as the profession evolves.

To help teachers deepen thier expertise, global leaders invest in time, space, funding, and support for reciprocal peer-to-peer learning and collaborative, innovative practice. Creating the working conditions for this kind of collaboration requires creativity. It means rethinking time and scheduling, reimagining the geography of classrooms, practicing flexibility with student groupings and class sizes, and using technology to facilitate collaboration.

- Finland has long had substantial time built into the school day for collaboration and peer-to-peer knowledge exchange. They are supplementing that long-standing practice with new digital technologies to disseminate teacher-led innovations. Finland recently established an open-source library of Open Educational Resources (OER). This platform allows teachers to upload education materials they develop to a database, and those resources are then curated by topic area and purpose.
- Singapore's three-track career ladder is a key structure for fostering leadership within the profession. Moving on to new roles and responsibilities requires teachers to demonstrate that they have the requisite knowledge, skills, and competencies to take the next step confidently. Teachers are expected to set and meet personal goals and to develop professionally throughout their careers. Teachers on higher "rungs" of the ladder support their colleagues in their growth and development and help them build the skills necessary to advance.

#### Examples at home:

The Colton Certificated Professional Learning Team in **Colton Joint Unified School District**, **California**, consisting of teachers, instructional coaches, and other professionals in the classroom, has developed a shared vision for professional learning. They are analyzing how professional learning is being used across the district, identifying pockets of excellence that could be brought to scale, and more systematically incorporating research on learning science into their instructional practices.



## Creating a culture of respect

Policies in high-performing systems promote a strong culture of respect and high status for the teaching profession as a whole. Global evidence is clear: respect toward teachers can be influenced by policy. In part, this is a result of investment in public storytelling and advocacy campaigns. But it also has to do with how policy structures teachers' jobs: ensuring adequate and competitive pay, actively supporting teachers' wellbeing, and giving teachers agency over their own learning. This also serves to attract and retain talent to the profession.

- Australia undertook a collaborative effort involving government, teachers, and other partners, which led to the development of a 2022 National Teacher Workforce Plan. One key initiative is a national campaign centered on celebrating the critical role of teachers. The plan also includes national scholarships to support aspiring teachers.
- In China, teachers' salaries must at least match those of local civil servants. Teachers are given time in the school day to grade, plan, collaborate, and conduct action research. China also celebrates teachers through holidays, public competitions, awards, secondments, and promotions.
- In England, a Teacher Wellbeing Index monitors wellbeing and develops systems for proactively supporting it. Developed by a nonprofit called Education Support, the Index is based on an annual survey of a sample of thousands of teachers. It links educators to government-sponsored health and mental health supports, life coaching, and short-term financial assistance opportunities.

#### Examples at home:

In **Pennsylvania**, collaboration between teachers, policymakers, and stakeholder and advocacy groups led to PA Needs Teachers. This initiative includes a comprehensive strategic plan laying out the root causes of their teacher shortages and proposing systemic solutions to teacher preparation, recruitment, and retention challenges. Policy proposals to improve teacher pay, make student teaching more attractive to diverse candidates, and adopt structures that change the nature of the teaching career are currently being considered by policymakers.



### Using technology to support learning

Teachers are supported in using technology in the classroom in ways that enhance learning. They receive professional learning to use digital technologies to advance their pedagogical goals, and they develop the skills to protect data and privacy.

- Finland is focused on enhancing digital skills among educators, including a revised national strategy on teacher preparation and more resource allocation for professional learning to include more digital skills.
- In Singapore, schools are integrating the use of augmented and virtual reality in their classroom. For example, virtual reality goggles can simulate a shoreline environment to help students study erosion prevention, or enable students to "get inside" a cell and manipulate the environment.

### Leveraging technology to enhance high-quality teaching

Teachers are irreplaceable. When used expertly by teachers, digital technology can offer many opportunities for enhancing pedagogy. Artificial intelligence can assist with creating highly personalized learning pathways for students. The gamification of learning can make it more engaging. Virtual reality enables experiences, such as complex science experiments or visits to historical sites, that would otherwise be cost prohibitive. Learning analytics let teachers study how students are progressing, what excites them, and when and where they are disengaging. For this to be done well, teachers need support to build skills and capacities in using technology, and technologies need to be designed with the needs of teaching and learning in mind.



#### Examples at home:

In Georgia, teachers are being supported to develop students' competencies in AI and to foster middle school students' interest in careers that use new digital technologies. A partnership of the Georgia Department of Education and Carnegie Mellon University, this initiative has an explicit focus on engaging middle-school level rural students and students of color. A select group of teachers will receive pilot professional learning in AI and culturally responsive instruction, and the professional learning module will later be refined based on feedback and become publicly available to all Georgia teachers.



### Empowering learner agency

The role of teaching in top-performing systems is increasingly evolving to empower learners' agency and ownership of learning. Top performers enable students to set goals for their learning, make informed and carefully guided choices about the structure and pace of learning pathways, embark on self-guided experiential learning, and develop the skills and confidence to advocate for their own needs.

- **Portugal has set a priority of educating for civic engagement**. They define this concept broadly, to include democratizing the learning process itself. This involves empowering students to make decisions and take increasing ownership of their education in ways that are developmentally appropriate, and respect the role of teachers as mentors, guides, and facilitators of joyful experiential learning.
- Singapore's Global Stewardship Program prepares students to take leadership roles in Singapore's future environmental sustainability. The initiative includes primary and secondary education, higher education, and lifelong learning initiatives. In primary and secondary schools, curriculum has been revised to incorporate deeper learning around sustainability and fostering more initiative and agency for promoting sustainability. Professional learning, digital learning experiences, and best practice toolkits have been developed for teachers to teach these concepts.



#### Examples at home:

**Madera Unified School District, California,** recently articulated a Graduate Profile, a new vision of what their students need to prosper in the future economy and thrive as the next leaders of a vibrant Madera. The district then examined what the job of teachers needs to look like so that all teachers are contributing to the shared vision of student success. They have explored and mapped out the systems, structures, incentives, schedules, staffing models, cultural norms, evaluation tools, and professional learning opportunities that would need to change to make that vision a reality.

## Key Trends to Watch Four Emerging Priorities



### Empowering teacher leaders to shape policy

#### Teacher leaders are driving change in policy, practice, and research.

Teachers undertake research, catalyze innovation, influence policy adoption, and lead transformative shifts. Engaging teachers in research and policy development results in more relevant implementation at the system and classroom levels. This approach not only garners stakeholder commitment but also fosters support for overarching visions, goals, and strategies.

- Sweden will ensure that teachers have a strong voice in ongoing decisions related to changing curriculum, and exercise leadership in new implementation. It will soon introduce a Qualification Framework for Teachers' Professional Learning including qualifications, credentials, and career development opportunities. The implementation of this framework will be overseen by a national council of teachers, policymakers, and university representatives.
- Estonia is giving teachers a voice in the policy development process. Every 10–15 years, the Estonian government prepares national development plans as well as strategic plans for each sector, including education. The process of creating a plan includes input from educators, students, parents, employers, and the general public. For the most recent plan, the Ministry organized a conference to introduce the plan to teachers. This involved teachers in the policy development process and prompted discussion, refinement, and further development.



#### Supporting learning anytime, anywhere

### Teachers are incentivizing and supporting learning that takes place anytime and anywhere, inside and outside the school.

Learning does not just take place in a school building. Young people learn in their homes, on playgrounds, with their friends and family, and on weekends. Top-performing systems are attempting to better proactively recognize students' communities as assets in the learning process, engaging parents and community members, and linking students to learning experiences within their communities.

• Since 2006, revisions to British Columbia's curriculum have been guided by the input of the First Nations Education Steering Committee of the Ministry of Education. Teaching and learning in British Columbia now incorporates the First Peoples' Principles of Learning, which, among other things, frames the importance of intergenerational learning, relational learning, connectedness to community and a sense of place, and the ways that learning is embedded in memory, history, and story.

#### Promoting learning for life

#### Systems are recognizing that the role of education is to promote learning for life.

Educators understand that learning is not limited to the initial 18 years, but extends throughout an individual's life. They aren't content with a system that merely prepares learners for the present-day workplace and then releases them into the world. Instead, their primary goal is to instill in learners the necessary skills and competencies needed to contribute to economic prosperity, social cohesion, and a sustainable future.

• Singapore is committed to what it calls a lifelong learning "movement," unveiled in 2014, called the SkillsFuture initiative. The goal is to promote a "culture and holistic system" of learning. All Singaporeans are provided with reimbursements for education and skills development in both career-related and other kinds of learning. For primary and secondary teachers, this means enabling their students to explore how the world of work is evolving, creating classroom environments where students can explore their interests and engage in self-directed learning, and modeling the kind of lifelong learning that is expected.



#### Exploring digital technology and AI

### Systems are exploring how new forms of digital technology and artificial intelligence continue to reshape the role of teaching.

Despite robust literature about the likely trajectory of artificial intelligence and large language models, the rise of ChatGPT took the education world by storm. It is likely that this shock is but the first of many as technology continues to evolve. How can education systems set teachers up to thrive as facilitators of new technological tools, so students can harness those new tools successfully for their education, careers, and lives?

• Estonia is researching and utilizing AI and digital technology in education. The Ministry of Education and Research, Education and Youth Board, and the University of Tartu have been collaborating for several years to study the impacts of AI and digital technologies on education; build, pilot, and refine new tools; and enlist teacher champions in trying new approaches and telling their stories. Building on a successful pilot of digitally enhanced personalized learning pathways, the Ministry has built out a resource hub and toolkit of test use cases. With the advent of ChatGPT, the collaborative is turning to study how large language models and smart tutoring methodologies can enhance new pedagogies, and building more tools for teachers to consider as they revamp their approaches.

## Looking Ahead Future-Fit Education

While global trends and outcomes remain in flux, the United States is poised to shine. With global leaders focusing on these pivotal issues, U.S. education policymakers and practitioners have the opportunity to lead the way. By crafting a teaching profession that not only thrives today, but also foresees and adapts to the myriad possibilities of tomorrow, we create the conditions which enable our schools and our students to flourish.

